

REMARKS

Claims 2-4, 6-8, 10-12 and 18-19 remain pending in the application with the present amendments. Claims 1, 5, 9, 14, 16 and 17 have been canceled herein. The objections to claim 11 and to the Specification have been addressed appropriately herein.

In the Office Action, claims 1, 5, 9, 14, 16, and 17 were rejected as anticipated under 35 U.S.C. §102(e) by U.S. Patent No. 6,532,517 to Wagner et al. ("Wagner"). These rejections are addressed by canceling these claims herein, as indicated above.

In the Office Action, claims 2, 3, 6, 7, 10, 11, and 18-19 were also rejected as anticipated under 35 U.S.C. §102(e) by U.S. Patent No. 6,490,670 to Collins et al. ("Collins"). Claims 4, 8 and 12 were rejected as anticipated under 35 U.S.C. §102(e) by U.S. Patent No. 6,185,666 to Murray et al. ("Murray"). These rejections are addressed herein by way of amendment, as described below.

As amended herein, claim 2 sets forth an invention in which a partition is requested having a size of 2 to  $n$ -th power. When a request to create a partition is received, it is determined whether there is an empty region having a size  $2^k$  times as large as the requested size (where  $k$  is a natural number). When there is such empty region, the requested partition is disposed in that empty region. However, when such empty region having the requested size does not exist, it is determined whether there is an empty region having a size which is  $2^k$  times a size of the requested partition. If there is such empty region, the empty region is then *successively divided by 2 until the size of the divided empty region becomes equal to the requested size*. The partition is then disposed in the divided region of the storage device. When there is neither a region having the requested size nor a region having  $2^k$  times the requested size, the partition is disposed in a region where a

partition can be created, that region being a position that can be aligned with the requested size. As amended herein, claims 6, 10 and 18 recite similar language.

Thus, as an example of operation according to the invention, when the requested size of the partition is 4, and the next larger empty region has a size 32, by the method claimed herein, the empty region is divided into two size 16 empty regions. Then, one of the size 16 empty regions is divided into two size 8 empty regions, and one of the size 8 empty regions is further divided into two size 4 regions. One of the size 4 regions is used to create the requested partition. As a result, the original size 32 empty region becomes one size 16 empty region, one size 8 empty region, one size 4 empty region, and the size 4 region that is assigned to create the partition. Three empty regions remain after the new partition is created, one having size 16, one having size 8 and one having size 4. Thus, two of the resulting regions of this example have a size which is larger than the requested partition.

Clearly, *Collins* neither teaches nor suggests these features of the invention. *Collins* neither teaches nor suggests successively dividing an empty region of memory until the size of the divided region becomes equal to the size of the requested partition. *Collins* merely describes a method in which a chunk of memory is divided into a number of memory blocks each of which has the same size, that is, the size of the requested object. Thus, according to the method described in *Collins*, when the object of size 4 is requested and the next larger empty region has a size 32, the size 32 empty region is divided into eight empty regions each having size 4. One of the size 4 regions is assigned to the requested object. However, seven relatively small empty regions each having size 4 remain as a result of the memory assignment.

Moreover, unlike the invention recited in the presently amended claims, *Collins* neither teaches nor suggests limiting the size of a requested partition to a size 2 to the n-th power, nor does *Collins* teach or suggest that when there is not a region having the requested size nor a region having 2k times the requested size, the partition is disposed in a region at a position that can be aligned with the requested size.

As amended herein, all other claims of the application, including claims 4, 8 and 12, now depend from the above-discussed claims, and are distinguished over *Collins* for at least the reasons discussed above.

Support for the present amendments is provided, *inter alia*, at ¶[0039] and ¶¶[0048] through [0052] of the Specification.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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